
**SYNTHYMIA FIXA (FABRICIUS, 1787) (LEP.: NOCTUIDAE) —
A RE-APPRAISAL OF ITS STATUS ON THE BRITISH LIST**

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Abstract

Hitherto in the British Isles, *Synthymia fixa* (Fabr.) (Lep.: Noctuidae) was known only from one specimen, and doubts have been expressed about this record. A second specimen has now been discovered, taken in the same year and at the same locality as the first. The status of the species on the British list is discussed. *Synthymia fixa* is rightly included on the British list, albeit as a vagrant.

Introduction

Until now, the only British record of *Synthymia fixa* was of one specimen, currently in The Natural History Museum, London (BMNH), taken at Start Lighthouse, Devon (VC 3) at an unspecified date in 1937. Doubts have been expressed about the record. A second specimen has now been found in another collection, taken at the same place in the same year, with an exact date, and almost certainly by the same person. Both specimens are females, although the note introducing the species to the British list, not written by the captor, specifically refers to only one, male, specimen. The data relating to both specimens are now considered as well as various publications, and the status of the species on the British list is reviewed.

Historical background

The species was added to the British list by Cockayne (1944: 49-50) on the basis of one specimen taken by a Mr A. W. Godfrey. Cockayne states:

“A male *Synthymia fixa*, F. (*monogramma*, Hbn.), in very fair condition, was taken at the Start lighthouse, S. Devon, in 1937 by A. W. Godfrey and handed to the late Sir Beckwith Whitehouse on 1st October. It is a pretty species with slender thorax and abdomen and orange hindwings, and is about the same size as *Ectypa glyphica*. It is a common Southern European species found in S. France, Spain, Portugal, Italy, Sicily, Malta, and Algeria, and flies in May and June. The foodplant is *psoralea bituminosa*. This little Noctuid has been placed by some authors in the genus *Homopyralis* and the figure of *H. contracta*, Walk., in Holland’s Moth book, plt. 30, gives a good idea of its appearance.”

The specimen is now in the BMNH. In fact it is a female, the ovipositor being clearly visible. It is pinned with a black brass pin, which has a very small head, and, unsurprisingly for a specimen of macrolepidoptera, it is not stage mounted. It possesses four labels:

1. “Taken at Start Lt House/A W Godfrey/Handed to Sir Beckwith/Whitehouse”, and “Oct 1. 1937” on the reverse of the label [in black ink, manuscript]
2. “Start Lighthouse/1937. A.W.Godfrey” [in blue-black ink, manuscript]

3. "Synthymia fixa/Whitehouse Coll/Sale Glendining/22.ii.1944. lot 309" [in blue-black ink, manuscript]
4. "Fig. by Brian Hargreaves/in The Moths and Butterflies/of Great Britain and Ireland" [in type]

The writing on the first label, including the reverse, is in a different hand from the other two manuscript labels, which appear to be in the same hand, and is made with a much thicker nib. The first manuscript label could not have been written at the time of capture and the third manuscript label could not have accompanied the specimen when it was given to Whitehouse, and obviously the typed one was not added until much later. If the second label is in the same hand as the third then it seems likely that both were written at the same time. If so, the specimen does not have an original data label now, if it ever possessed one.

Sir Beckwith Whitehouse was an eminent gynaecologist who died suddenly on 28 July 1943 (Cockayne, 1943: 94). He had an extensive Lepidoptera collection, including continental European and exotic species, which was auctioned by Glendining & Co. during four days between late 1943 and early 1944. Russell (1944: 1-3; 17-18; 33-35; 56-57) reported on highlights from the sale of the British Lepidoptera and at an early stage (1944: 1) remarks cryptically "Rumour says that some of the insects are ultimately doomed to seclusion in a remote provincial Museum, where they will be lost to sight, and this perhaps may be the best thing that can happen to them". Presumably this means that he had doubts as to the provenance of some.

Cockayne (1943: 94) comments that Whitehouse bought insects on a large scale after the outbreak of the Second World War. Russell's account of the sale (1944: *loc. cit.*) lists a number of specimens auctioned, with sale prices, on 16 November 1943, 25 January 1944 and 21 and 22 February 1944. These included the following very rare British species, two of which were each then known only from four British specimens: *Notodonta tritophus* ([Denis & Schiffermüller], 1775), one specimen; *Leucodonta bicoloria* ([Denis & Schiffermüller], 1775), three specimens; *Periphanes delphinii* (Linnaeus, 1758), one specimen; *Acontia lucida* (Hufnagel, 1766), three specimens and *Catephia alchymista* ([Denis & Schiffermüller], 1775), one specimen. I have used the current scientific names. Specimens of the latter three species were sold on 22 February 1944, as recorded by both Russell (1944: 56-57) and Rait-Smith (1944: 142-144), the same day as the *Synthymia fixa*, but, possibly significantly, neither mentions this.

Cockayne's note adding the species to the British list was published in the April 1944 issue of this journal and Russell's report on the auction of 21 and 22 February 1944 appeared in the next month's issue. I do not know whether this report was written before or after Cockayne's note, but in either event points arise. If before, then as shown below, the auction catalogue makes clear that the specimen was a new British species and surely Russell would have noticed this and mentioned it, at least if he had no doubt as to its provenance. If after, then it is equally surprising that the specimen was not mentioned. In either event, it is also puzzling that Cockayne, who

was on the editorial board, did not comment on the fact that the specimen had been auctioned, or its whereabouts, when he added it to the British list.

Various points are not clear from Cockayne's published note, namely when was the moth identified and by whom, when Cockayne came to know of it, and how did the moth come to Whitehouse's attention. Other points arise from the data labels, namely who wrote the one recording that the specimen was handed to Whitehouse, and when, and who wrote the other two labels and when. If the specimen were ever shown at the Annual Exhibition of the then South London entomological and natural history Society, the usual forum for exhibiting a species of macrolepidoptera new to Britain, then none of the published Proceedings and Transactions of that Society record this.

It may be significant that in his two reviews of macrolepidoptera added to the British list since South (1907, 1908) de Worms (1951: 153-168; 1963: 101-119) makes no mention of the species, although he includes such casual vagrants as *Raphia frater* Grote, 1864, a North American species taken at light in 1939 and *Utetheisa bella* (Linnaeus, 1758), another North American species taken in 1948, both of which he considered to be accidentally imported. He was extremely interested in the British macrolepidoptera, and a frequent visitor to the BMNH, and it seems unlikely that he was unaware of Cockayne's publication. I assume that his omission was deliberate.

Stidston (1952) published a list of the macrolepidoptera of Devon and he also makes no reference to the species. However, he included certain dubious records without comment, e.g. by repeating a record from The Victoria County History for Devon of *Aegeria chrysidiformis* (Esper, 1782) (now *Pyropteron chrysidiformis*) which was allegedly "seen" in North Devon on 7 September 1888, an extremely late date for a species which flies from June to July, and which is currently known only from a restricted area in Kent, and with old records from only a few places in Hampshire, Sussex and Essex. Stidston's omission was probably due to oversight, rather than doubts as to the validity of the record.

Bretherton (1983: 289) makes clear his views by saying that *Synthymia fixa* is:

"Doubtfully British. The only specimen, which is now in BMNH, is a female with strongly projecting ovipositor (not a male, as stated by South (1961)). It is labelled 'Start lighthouse 1937, A. W. Godfrey. Whitehouse coll., sale Glendinning [*sic*], 1944, lot 309'. This agrees with the catalogue of sale of the third portion of that collection on 21 [*sic*] February 1944, where it is described as 'Euclididae species: an extremely rare continental migrant taken Start lighthouse by Godfrey and given to B. W. 1st October 1937'".

Although South says that the specimen is a male, he is clearly following Cockayne. Bretherton says that the data label agrees with the sale catalogue. This is correct so far as the first label attached to the specimen is concerned, but for reasons given earlier it seems unlikely that this label was made by the captor. The third label correctly records that the specimen was lot 309, which was sold on 22, and not 21, February 1944.

Bretherton goes on to comment that the specimen sold for £2.00, attributing this to Chalmers-Hunt (1976). In fact Chalmers-Hunt's publication does not record the catalogue detail nor price; this information presumably came from the catalogue then in the possession of Mr J. M. Chalmers-Hunt. The price is interesting. It was believed to be the only British specimen, but it fetched less than the one *Periphanes delphinii* (£4 15s), and the one *Catephia alchymista* (£21) (Rait-Smith, 1944: 144; Russell, 1944: 56-57). This suggests that potential buyers had doubts about its authenticity.

Bretherton remarks that it is surprising that such an experienced collector as Sir Beckwith Whitehouse would have failed to recognise it and record it himself as new to Britain if he had been satisfied of its origin. Cockayne (1943: 94), however, states that Sir Beckwith Whitehouse's "large consulting practice, his duties to the hospitals for which he worked, and his medical publications prevented him from contributing largely to entomological literature". Bretherton also says that the specimen "was identified and recorded as new to Britain without further information or comment by Cockayne (1944)". I am not sure what he meant by this. The fact that Cockayne published a note adding the species to the British list and, if as seems likely from what is set out below, he bought the specimen and gave it to the BMNH shows that he had no doubts as to its origin. Bretherton ends his comments by saying that "A mistake or some transposition of labels before the specimen reached Cockayne's hands cannot be excluded". After referring to the distribution of the species in Europe and North Africa he says that it has not been noted as a migrant.

In passing, it should be mentioned that Cockayne's note published in 1944 referred to by Bretherton is not included in the list of references at the end of that volume of *The Moths and Butterflies of Great Britain and Ireland*.

The Entomology Library of the BMNH has an extensive collection of auction catalogues, donated by Mr J. M. Chalmers-Hunt. This contains two copies of the relevant auction catalogue. An entry on page 20 reads "309 EUCLIDIDAE species, an extremely rare Continental migrant, (taken at Start Lighthouse, by A. W. Godfrey, and given to Sir Beckwith Whitehouse on October 1st, 1937)". Both catalogues have various manuscript comments in the margins with prices and initials. Against this entry on one is "10/- BHS" and against the other "£2 C". This latter catalogue is a record of all the prices actually paid, whereas the former looks as though it is a note of bids to be made on behalf of various clients. This is shown by the fact that as regards lot 310, *Catephia alchymista*, given as "ALCHYMISTA", and lot 312, *Periphanes delphinii*, given as "DELPHINII", the former catalogue has the words "BUY" and "Barton-White/£5.10.0" respectively against these in the right hand margin and the latter has "£21 N" and "4.15 - DN" against them in the right hand margin, which are the prices given by Rait-Smith (1944: 144) and Russell (1944: 56-57). I have not been able to trace what the various initials represent, but it seems likely that "C" meant Cockayne.

With the benefit of those catalogues, it is clear that the specimen was recognised as a rare Continental migrant at the time the catalogue was prepared and that the compiler of the catalogue presumably attributed the information that it was given to

Whitehouse on 1 October 1937 from the manuscript label in thick black ink, which I assume accompanied the specimen. The two other manuscript labels on the pin are likely to have been written by the purchaser of the specimen, or someone on his behalf. The fact that the species is not identified in the catalogue as *Synthymia fixa*, all other species on that page being identified by the then specific, but not generic, names, suggests that it had not yet been determined as that species. If so, this leads credence to the possibility that it was indeed Cockayne who bought the specimen, and then published his note after, presumably, identifying it himself.

Skinner (1984: 141) says that the species is a suspected immigrant, the only British specimen being taken at Start Point Lighthouse in 1937. This is repeated in the second edition published in 1998. Waring & Townsend (2003: 373) say "Rare immigrant. One British record of this mainly day-flying species. A singleton, recorded as collected at Start Point lighthouse, south Devon in 1937, is now in the Natural History Museum, London." They include an Appendix (2003: 405-413) listing species doubtfully recorded in Great Britain and Ireland or recorded as probable imports only but do not include *S. fixa* in this.

Discovery of a second specimen

A second specimen of *S. fixa* has now been discovered, at Overbecks, Sharpitor, Salcombe, Devon, a National Trust property on the south Devon coast. This was also taken at Start Lighthouse in 1937. By coincidence, Overbecks is approximately 10 kms to the west of Start Lighthouse.

Overbecks has a collection of both macrolepidoptera and microlepidoptera, housed in two 36 drawer cabinets. Most, but not all, are of British origin and most were collected by J. M. Jaques; some of the microlepidoptera were taken by A. R. Hayward, who died in 1939, L. T. Ford, who died in 1961 and S. H. Wakely who died in 1976. The collections of the latter two are now in the BMNH and Cambridge University respectively, and so it is likely that specimens taken by Ford and Wakely were donated before their deaths. I have not been able to trace when Jaques died, and indeed have been unable to discover much about him except that the Proceedings and Transactions of the South London entomological and natural history Society show that he was a member from 1942 until 1952-53 and lived at Coulsdon, Surrey. A National Trust booklet produced in 1981 on Overbecks says that this collection "was put together by J. M. Jaques [*sic*] in the 1920s and 1930s. It contains an almost complete collection of British Lepidoptera arranged in series from butterflies to micros." Overbecks houses various collections, for example of birds, shells and fossils, and it is thought probable that the lepidoptera collection was acquired by another National Trust property and then transferred to Overbecks to complement its other collections.

Like the one in the BMNH, the specimen at Overbecks is pinned with a black brass pin which has a very small head and appears to be of the same length and size as that used for the BMNH specimen. It too is a female, the ovipositor being clearly visible, and it has one manuscript label in blue-black ink which reads "Start Point/Lighthouse/23.vi.37". No name of the captor is given. The handwriting does

not appear to be the same as that on any of the three manuscript labels accompanying the specimen in the BMNH.

The *S. fixa* is currently in the third row of drawer 24, which otherwise contains only Pyralidae. It is one of two specimens that have below them the label '*polygonalis*'. Like the rest of the microlepidoptera (but none of the macrolepidoptera), these two are stage mounted on individual polyporous strips, with different data labels. The first in the row is indeed *Uresiphita polygonalis* ([Denis & Schiffermüller], 1775), a rare immigrant Pyralid to the British Isles. It has a data label in black type which simply reads "Bautzen/Saxon", with no indication of the captor. The *S. fixa* has no antennae, but otherwise is in reasonable condition. There is no reason to suppose that these two specimens at Overbecks were taken by the same person, and indeed the nature of the data labels, if nothing else, suggests that the captors were not the same.

Discussion

In view of the doubts as to the origin of the specimen in the BMNH implied by Russell and Rait-Smith in not mentioning this species in their account of the auction of Whitehouse's collection and de Worms' omission of it from his reviews of macrolepidoptera added to the British list, as well as the express doubts raised by Bretherton, although apparently not shared by Skinner and Waring & Townsend, the question arises as to whether the specimens in the BMNH and at Overbecks were indeed taken at Start lighthouse.

This in turn raises the following points. When was the specimen now in the BMNH deposited there and who made the donation? Why did Cockayne, a very experienced entomologist, say that the specimen was a male? If both specimens were taken by Godfrey, why did he, apparently, show Whitehouse only one? If Godfrey took the one now at Overbecks why does that bear a data label which was presumably made at the time, and the one given to Whitehouse, which was taken by Godfrey, bear no contemporaneous data label? If the one at Overbecks had been taken by someone else, why did that person not publish that record? How and when did that specimen come into the Jaques' collection, and where did it come from? His collection shows that he knew well both macrolepidoptera and microlepidoptera. It seems very unlikely that he would have misidentified the *Synthymia fixa* as *Uresiphita polygonalis*, especially as it is clearly different from the true *polygonalis* above it in the same row. Presumably it was staged mounted by someone, possibly a member of the National Trust staff during curation, who thought it was in the Pyralidae.

I try to provide answers to some, but not all, of these points below.

It seems more than likely that Cockayne bought the specimen sold at auction and later bequeathed it to the BMNH, either as an individual donation or part of his collection which went to form the Rothschild-Cockayne-Kettlewell collection at the BMNH. Jacobs (1957: 120-122) records that Cockayne purchased many choice items at auction sales of Lepidoptera to enrich this collection, and also successfully invited donations from private collections. It also seems plausible that some slip

occurred when Cockayne wrote his published note in which the specimen is referred to as a male. It is scarcely credible that Cockayne misidentified its sex.

Whitehouse, who lived in Birmingham, Warwickshire, collected on the south Devon coast during at least September 1911, when he took *Mythimna unipuncta* (Haworth, 1809), *Spodoptera exigua* (Hübner, 1808) and *Agrotis exclamationis* (Linnaeus, 1758) (Whitehouse, 1911: 366-367; 409). It is clear that he had various contacts who would provide him with interesting species, because he records (1935: 115-116) that in 1934 he received over 50 pupae of *Acherontia atropos* (Linnaeus, 1758) from potato diggers in Kent. Therefore it is quite likely that Whitehouse knew Godfrey and was handed the specimen during an entomological visit to the south Devon coast. What is unclear is whether Whitehouse knew of the second specimen. If he did then it appears that Cockayne did not.

I do not know how the second specimen reached the Jaques collection. This has no other specimen, of either macrolepidoptera or microlepidoptera, bearing a data label with Start Point Lighthouse as a locality, nor with Godfrey's name.

Some of the matters raised above show that it is understandable why there were doubts as to whether the specimen in the BMNH was genuinely British, but the following points suggest that those doubts should be removed and the species should remain on the British list.

The most important point is the existence of the second specimen with a data label. There is no reason to believe that this specimen was not taken on the date and at the place recorded. The fact that both specimens have similar pins may be a pointer to both being taken by the same person. If Godfrey took the specimen now at Overbecks then it appears that he was accustomed to writing data labels. If that specimen was taken by him then presumably its data label was written before Godfrey handed the other specimen to Whitehouse, so why does that one not bear a label in Godfrey's hand? I suppose that it is possible, although it seems unlikely, that he wrote one which Whitehouse or someone else removed.

Although it might seem extremely unlikely that two specimens of this species arrived at Start Lighthouse either on the same date, or, if not, then in the same year this would not be the only time that a very rare immigrant has turned up twice at the same locality in the same year. On 2 February 1967 Mr D. W. H. Ffennell (1967: 56) had two *Tathorhynchus exsiccata* (Lederer, 1855) at light in his garden and a third specimen the following night. Until then only six specimens had been recorded from the British Isles. A. W. Godfrey worked at Start Lighthouse. According to Dannreuther (1935: 209) Godfrey was the Senior Assistant Lighthouse Keeper there in 1935 and no doubt held the same position in 1937. Godfrey submitted records to Dannreuther for various migration reports which the latter published. Some of those for 1937 (Dannreuther, 1937: 176-180) showed that between 5 and 14 June Godfrey noted 18 *Vanessa cardui* (Linnaeus, 1758) at Start Lighthouse and that during the afternoon of 8 June three *Macroglossum stellatarum* (Linnaeus, 1758) came in from the sea and went north-north-west and on 14 June two others did likewise. On 3 August Godfrey recorded a steady stream of *Autographa gamma* (Linnaeus, 1758) from 0.20 to 4.10 a.m. in calm weather with only about 20 pausing momentarily to

rest on the lantern before all flew away due south out to sea, about 200 ft. above sea-level; the temperature was 68 F. and barometer 29° 74". On the same morning Godfrey observed a single *Hyles galii* (Rottemburg, 1775) coming in from the sea at 1.20 a.m. and flying to the north-north-east, which was captured and found to be in good condition (Dannreuther, 1937: 200-202).

Dannreuther does not make any mention of *Synthymia fixa*, nor is there any published record from Godfrey for the 23 June 1937, the date of the specimen at Overbecks. This is not surprising because Dannreuther's account of migration in 1937 was published, in parts, during the course of that year. This was before the species had been identified, assuming that the entry for lot 309 in the sale catalogue for the 1944 auction of Whitehouse's collection was a correct reflection of the state of knowledge of the identification of that specimen.

It seems likely that Godfrey must have kept written notes of his records, but they are no longer at the lighthouse, if they were ever kept there. Unfortunately I have been unable to find out any other information about him, but it is clear that he was interested in migration of Lepidoptera and made detailed records.

Conclusions

For the reasons given above, I consider that both specimens of *Synthymia fixa* were taken at Start Lighthouse and the species is rightly included on the British list, albeit as a vagrant.

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References

- Bretherton, R. F., 1983. In Emmet, A. M. & Heath, J. (Eds), *The Moths and Butterflies of Great Britain and Ireland*. Volume 10. Harley Books.
- Chalmers-Hunt, J. M., 1976. *Natural history auctions 1700-1972: a register of sales in the British Isles*. Sotheby Parke Bernet.
- Cockayne, E. A., 1943. Obituary. Professor Sir Beckwith Whitehouse. *Entomologist's Record and Journal of Variation* **55**: 94.
- , 1944. *Synthymia fixa*, F., in England. *Entomologist's Record and Journal of Variation* **56**: 49-50.
- Dannreuther, T., 1935. Migration records, 1935. *Entomologist* **68**: 209-212.
- , 1937. Migration records, 1937. *Entomologist* **70**: 176-180; 200-202.
- Ffennell, D., 1967. Some rare and early migrants. *Entomologist's Gazette* **18**: 56.
- Jacobs, S. N. A., 1957. Obituary. Dr. E. A. Cockayne. *Entomologist's Record and Journal of Variation* **69**: 120-122.
- Rait-Smith, W., 1944. The sale of the Whitehouse collection: third portion. *Entomologist* **77**: 142-144.
- Russell, S. G. C., 1944. The Whitehouse sale of British Lepidoptera. *Entomologist's Record and Journal of Variation* **56**: 1-3; 17-18; 33-35; 56-57.

- Skinner, B., 1984. *Colour Identification Guide to Moths of the British Isles*. Viking.
- South, R., 1907. *The Moths of the British Isles* 1. Warne, London.
- , 1908. *The Moths of the British Isles* 2. Warne, London.
- , 1961. *The Moths of the British Isles* (Edn 4). 1. Warne, London.
- Stidston, S. T., 1952. *A list of the Lepidoptera of Devon*, Introduction and Part I. Torquay.
- Waring, P. & Townsend, M., 2003. *Field Guide to the Moths of Great Britain and Ireland*. Hook.
- Whitehouse, B., 1911. *Leucania unipuncta* (Haworth) *extranea* (Guenée) in Devonshire. *Entomologist* 44: 366.
- , 1911. *Caradrina exigua* in Devonshire. *Entomologist* 44: 366-367.
- , 1935. *Acherontia atropos* in 1934. *Entomologist* 68: 115-116.
- Worms, C. G. M. de, 1951. New additions to the British Macrolepidoptera during the past Half Century. *Entomologist's Gazette* 2: 153-168, 1 pl.
- , 1963. Recent additions to the British Macrolepidoptera. With a review of the present status of certain other migrant and colonising species. *Entomologist's Gazette* 14: 101-119, 2 pls.

***Moma alpium* Osbeck (Lep.: Noctuidae) – decline in awareness of its dimorphic character in Britain**

Edward Newman's 1872 work *An Illustrated Natural History of British Moths* was published when the study of British moths was still in its infancy. Nevertheless, his volume portrayed excellent black and white illustrations of two forms of *Moma alpium* – typical *alpium* and ab. *runica* Stephens, and suggesting that "it is very probable that there are two species combined under one name" and also that J. Stephens was of that opinion. However, Newman made no reference to the relative frequency of the two forms. Barrett (1896. *The Lepidoptera of the British Islands*, 111) illustrated both these forms and a further more lightly marked specimen. It would seem that he was aware of the the relative frequency of the two forms in Britain, labelling the first specimen *orion*, the specific name used for the species at that time, and the second as an aberration obtained by Dr. Chapman – the scarcer form and that accepted as the type form of *M. alpium* to-day. The third important work on British moths produced in the latter part of the nineteenth century was the un-illustrated *British Noctuae and their Varieties* (Tutt, 1891); this demonstrated his awareness of the relative incidence of the two forms, stating "in a long series I have only one specimen that represents the type, all the others having single transverse lines and thus representing ab. *runica*". These volumes have now been largely superseded by modern ones less detailed in character, and the result has been a generation of lepidopterists unaware of the dimorphic nature of *M. alpium*. Early in the twentieth century South (1907. *Moths of the British Isles*) was published in two volumes and rapidly became the main source of information on British moths, not being supplanted until Skinner (1984. *Colour Identification Guide to the Moths of*